

Appl. No. 09/837,020  
Amdt. Dated February 20, 2006

**• • R E M A R K S / A R G U M E N T S • •**

The present Preliminary Amendment is being filed together with a Request for Continued Examination (RCE) of the above-identified application.

By the present amendment, the limitations of dependent claims 2 and 5 have been incorporated into independent claim 1. In addition, dependent claims 2, 4-6 and 8-12 which recited the limitations that have been incorporated into independent claim 1 have been canceled

New claims 14-16 have been added which are directed to additional features of applicants' invention.

Entry of the changes to the claims is respectfully requested.

Claims 1, 3, 7 and 13-16 are pending in this application.

The previous claims (1-6 and 13) in this application were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,701,700 to Kohno et al. Skarpaas, *Population Viability Analysis for the Oyster Plant (Mertensia maritime) in the Oslofjord Region*, and (claims 7-12) U.S. Patent No. 5,701,700 to Kohno et al. "as applied to claim 1" and further in view of U.S. Patent No. 5,525,131 to Asano.

Applicants' invention involves a method of method of preventing defective germination or growth of a plant which involves, in part, encapsulating seeds in an aqueous gel capsule that has a moisture content of at least 90 wt %, and then subjecting the gel-encapsulated seeds to a refrigeration

Appl. No. 09/837,020  
Amdt. Dated February 20, 2006

treatment under one of a humidifying condition or in an airtight container so that moisture is not lost from the aqueous gel capsule.

Kohno et al. was relied upon by the Examiner as teaching:

...a method of encapsulating one plate seed or a plurality of plant seeds in an aqueous gel capsule (Kohno Col. 1 line 10-20); refrigerating the plant seeds under the condition that the plant seeds do not germinate (Kohno Col. 4 line 39); and sowing the plant seeds (Kohno Col. 1, line 21-25 and Col. 3 line 27-36).

In actuality, Kohno et al. teach the use of a "storage solution" that has a concentration of metal ions in the range of 0.0001 to 0.6 % by weight. (See column 2, lines 18-32)

Suitable metal ions include "divalent metal ions, such as a calcium ion and a barium ion, and an aluminum ion." (See column 2, lines 33-37)

Kohno et al. teaches that "[i]t is required that the storage solution has an osmotic pressure that gives no adverse influence on the compressive breaking strength of the gel coat." (See column 2, lines 39-41). "For osmotic pressure control, the storage solution may contain various compounds other than the metal ion for coagulation. Compounds useful to this effect include non-ionic substances (e.g., Polyethylene glycol), sodium chloride, potassium nitrate, and aluminum sulfate. (See column 2, line 66 through column 3, line 3)

It is clear that Kohno et al. expressly require a "storage solution" that has a certain chemical composition and physical properties.

In contrast, applicants' refrigeration treatment only involves a humidifying condition or an airtight container in order to prevent loose of moisture of the gel-encapsulate coating.

Appl. No. 09/837,020  
Amdt. Dated February 20, 2006

A standard definition of "humidity" is "Dampness, especially of the air" from [www.dictionary.com](http://www.dictionary.com) citing *The American Heritage® Dictionary of the English Language*, Fourth Edition Copyright © 2000 by Houghton Mifflin Company.

Kohn et al.'s requirement for a "storage solution" with a particular metal ion concentration and osmotic pressure, excludes the use a refrigeration treatment that uses either a humidifying condition or an airtight container, each of which is relied upon to prevent the gel-encapsulate coating from losing its moisture content.

Using only a humidifying condition of airtight container in Kohn et al. without the storage solution would destroy the teachings of Kohn et al.

Accordingly, it is submitted that Kohn et al. cannot be relied upon as teaching or suggesting or in any way as rendering applicants' claimed invention obvious.

Likewise, Skarpaas teaches "water dispersed nutlets" which comprises nutlets from the oyster plant that fall into sea water.

Asano does not even teach a refrigeration treatment.

Based upon the above distinctions between the prior art previously relied upon by the Examiner and the present invention, and the overall teachings of prior art, properly considered as a whole, it is respectfully submitted that the Examiner cannot rely upon the prior art as required under 35 U.S.C. §103 to establish a *prima facie* case of obviousness of applicants' claimed invention.

It is, therefore, submitted that any reliance upon prior art would be improper inasmuch as the prior art does not remotely anticipate, teach, suggest or render obvious the present invention.

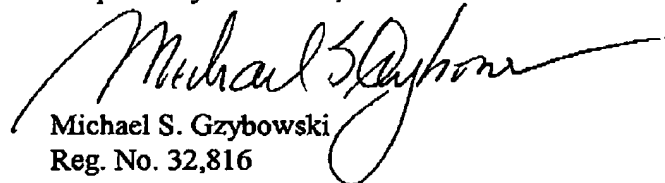
Appl. No. 09/837,020  
Amdt. Dated February 20, 2006

Entry of the present Preliminary Amendment and an early examination of the application are respectfully requested.

If upon consideration of the above, the Examiner should feel that there remain outstanding issues in the present application that could be resolved; the Examiner is invited to contact applicants' patent counsel at the telephone number given below to discuss such issues.

To the extent necessary, a petition for an extension of time under 37 CFR §1.136 is hereby made. Please charge the fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 12-2136 and please credit any excess fees to such deposit account.

Respectfully submitted,



Michael S. Gzybowski  
Reg. No. 32,816

BUTZEL LONG  
350 South Main Street  
Suite 300  
Ann Arbor, Michigan 48104  
(734) 995-3110

144541.1